## PE STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

ATTORNEYS AT LAW

HIOO NEW YORK AVENUE, N.W. • WASHINGTON, D.C. 20005-3934

PHONE: (202) 371-2600 . FACSIMILE: (202) 371-2540 . www.skgf.com

ROBERT GREE COLORS

CONTROL OF THE COLORS

ROBERT W. ESMOND

TRACY-GENE G. DURKIN

MICHAEL B. RAY

ROBERT E. SOKOHL

ERIC K. STEFFE

MICHAEL O. LEE

STEVEN R. LUDWIG

JUL 2 3 2001

JOHN M. COVERT
LINDA E. ALCORN
ROBERT C. MILLONIG
MICHAEL V. MESSINGER
JUDITH U. KIM
TIMOTHY J. SHEA, JR.
DONALD R. MCPHAIL
PATRICK E. GARRETT
JEFFREY T. HELVEY\*
HEIDI L. KRAUS
JEFFREY R. KURIN
RAYMOND MILLIEN
PATRICK D. O'BRIEN

LAWRENCE B. BUGAISKY
CRYSTAL D. SAYLES
EDWARD W. YEE
ALBERT L. FERRO\*
DONALD R. BANOWIT
PETER A. JACKMAN
MOLLY A. MCCALL
TERESA U. MEDLER
JEFFREY S. WEAVER
KRISTIN K. VIDOVICH
KENDRICK P. PATTERSON
DONALD J. FEATHERSTONE
GRANT E. REED

VINCENT L. CAPUANO
JOHN A. HARROUN\*
ALBERT J. FASULO II\*
ELDORA ELLISON FLOYD\*
W. RUSSELL SWINDELL
THOMAS C. FIALA
BRIAN J. DEL BUONO\*
VIRGIL L. BEASTON\*
RYAN J. STAMPER\*
KAREN R. MARKOWICZ\*\*
SUZANNE E. ZISKA\*\*
ANDREA J. KAMAGE\*\*
NANCY J. LEITH\*\*

ELIZABETH J. HAANES\*\*
MARK P. TERRY\*\*
JOSEPH M. CONRAD, III\*\*
DOUGLAS M. WILSON\*\*
REGINALD D. LUCAS\*\*
ANN E. SUMMERFIELD\*\*
CYNTHIA M. BOUCHEZ\*\*
HELENE C. CARLSON\*\*
BRUCE E. CHALKER\*\*
DUSTIN T. JOHNSON\*\*
MATTHEW J. DOWD\*\*

\*LIMITED TO MATTERS
AND PROCEEDINGS BEFORE
FEDERAL COURTS & AGENCIES
\*\*REGISTERED PATENT AGENT
\*\*SENIOR COUNSEL

July 23, 2001

WRITER'S DIRECT NUMBER: (202) 371-2637
INTERNET ADDRESS:

KARENM@SKGF.COM

Commissioner for Patents Washington, D.C. 20231

Re:

U.S. Utility Patent Application

Appl. No. 09/720,086; Filed: December 20, 2000

For: De Novo DNA Cytosine Methyltransferase Genes, Polypeptides and

**Uses Thereof** 

Inventors:

Li et al.

Our Ref:

0609.4560002/JAG/KRM

Sir:

In reply to the Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office and the Notification to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures, dated May 21, 2001, Applicants submit the following documents for appropriate action by the U.S. Patent and Trademark Office:

- 1. PTO Fee Transmittal Form (PTO/SB/17);
- 2. Petition For Extension of Time Under 37 C.F.R. § 1.136(a)(1) (in duplicate);
- 3. Copy of the Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office;
- 4. Copy of the Notification to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures;
- 5. Original Declaration, executed by inventors En Li and Masaki Okano;

Commissioner for Patents July 23, 2001 Page 2

- Original Declaration, executed by inventor Shaoping Xie; 6.
- 7. Paper and computer readable copy of Sequence Listing;
- Request to Approve Proposed Drawing Corrections, along with 12 sheets of Figures 8. hand-corrected in red ink (1A, 1B-1, 1C, 2A, 2B, 2C, 3A, and 3B);
- Our check no. 31978 for \$55.00 to cover the extension of time fee under 37 C.F.R. 9. § 1.136 (small entity); and
- 10. SKGF Return Postcard.

In accordance with 37 C.F.R. § 1.821(f), the paper copy of the sequence listing and the computer readable copy of the sequence listing submitted herewith in the above application are the same. In accordance with 37 C.F.R. § 1.821(g), the submission of this sequence listing includes no new matter.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this letter is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Kaun R. Marwid 123

07/26/2001 UEDUVIJE 00000037 09720086

01 FC:215

55.00 GP

Karen R. Markowicz

Agent for Applicants

Registration No. 36,351

KRM/pcd

0\4560002\formal-docs etc.skgf.cvrltr Œ

09/27/2001 WCLAYERD 00000013 190036

01 FC:115

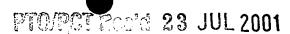
55.00 CH

55.00 DP

Р

OEW	Complete if Known		
OFEE TRANSMITTAL	Application Number	09/720,086	
fat EV 2004	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	December 20, 2000	
( , for EY 2001	First Named Inventor	En Li	
3/1	Examiner Name	To be assigned	
Patent fees are subject to annual revision.	Group Art Unit	To be assigned	
OTAL AMOUNT OF PANALENT NO. (\$)55.00	Attorney Docket No.	0609.4560002/JAG/KRM	

METH	IOD OF PAYMENT (chec	k one)				FEE	CALCULATION (	continued)		
1.   The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:		3. ADDI'I Large			Entity		<u>-</u> .			
Deposit Account Number	19-0036		Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Do	escription		Fee paid
Deposit Account Name	Sterne, Kessler, Goldstein &	Fox P.L.L.C.	105	130	205	65	Surcharge - late filing for	ee or oath		
			127	50	227	25	Surcharge - late provisional	filing fee or cover sheet	:	
	Additional Fee Required R §§ 1.16 and 1.17		139	130	139	130	Non-English specific	cation		
Applicant cla	ims small entity status		147	2,520	147	2,520	For filing a request for	r <i>ex parte</i> reexamina	ation	
See 37 CFR I			112	920*	112	920*	Requesting publication o action	f SIR prior to Examine	r	
2. Payment Enc	losed:		113	1,840*	113	1,840*	Requesting publication o	f SIR after Examiner a	ction	
*Charge any deficienci	Credit card Money Ordes or credit any overpayments in the 2 and 3 below to Deposit Account	the fees or fee	115	110	215	55	Extension for reply wi	thin first month		55.00
	FEE CALCULATION		116	390	216	195	Extension for reply wi	thin second month		
1. BASIC FILING	EE		117	890	217	445	Extension for reply wi	thin third month		
Large Entity Sma	II Entity		118	1,390	218	695	Extension for reply wi	thin fourth month		
Fee Fee Fee Code (\$) Cod	Fee Fee Description le (\$)	Fee Paid	128	1,890	228	945	Extension for reply wi	thin fifth month		
101 710 201	355 Utility filing fee	·	119	310	219	155	Notice of Appeal			
106 320 206	160 Design filing fee		120	310	220	155	Filing a brief in suppo	rt of an appeal		
107 490 207	245 Plant filing fee		121	270	221	135	Request for oral heari	ng		
108 710 208	355 Reissue filing fee		138	1,510	138	1,510	Petition to institute a	oublic use proceedi	ng	
<u>.1</u> 14 150 214	75 Provisional filing fe	e	140	110	240	55	Petition to revive - una	avoidable		
			141	1,240	241	620	Petition to revive - uni	intentional		
SUBTOTAL	. (1) (\$)		142	1,240	242	620	Utility issue fee (or rei	issue)		
		,	143	440	243	220	Design issue fee			
			144	600	244	300	Plant issue fee			
			122	130	122	130	Petitions to the Comn	nissioner		
2. EXTRA CLAIM	FEES Fee from Extra below	) Fee Paid	123	130	123	130	Petitions related to pro-			
Total Claims	- 20** = X	=	126	180	126	180	Submission of Informa	ation Disclosure Str	nt	
	3** = X		581	40	481	40	Recording each pater property (times number			
Multiple Dependent		. =	146	710	246		Filing a submission at (37 CFR 1.129(a))			
Large Entity Smal	ree ree bescription	1	149	710	249	355	For each additional in (37 CFR 1.129(b))	vention to be exam	ined	
Code (\$) Code	9 Claims in excess of 20	0	179	710	279	355	Request for Continue	d Examination (RCI	Ε)	
102 80 202 104 270 204	40 Independent claims in 135 Multiple dependent cla		169	900	169	900	Request for expedited application	d examination of a c	lesign	
108 80 209	40 **Reissue independer		Other fee (	specify) :	:					
110 18 210	patent 9 **Reissue claims in ex original patent	xcess of 20 and over	Other fee (	specify) :	:					$\vdash$
			*Reduced	by Basic	Filing Fee	Paid	SUBTOTAL	(3) (\$) <u>55.00</u>		
	y paid, if greater, For Reissues, se	ee above	<u></u>			_	CODICIAL	Complete (if app		(a)
SUBMITTED BY	<u> </u>		-	т.	logistratic:	. No				
Name (Print/Type) Karen R. Markowicz			-		legistration httorney/Ageni	) NO.	36,351	Telephone	202-	-371-2600
Signature Launk. Malwolls Date 7/23/01										



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Li et al.

Appl. No. 09/720,086

Filed: December 20, 2000

For:

De Novo DNA Cytosine

Methyltransferase Genes,

Polypeptides and Uses Thereof

Confirmation No. N/A

Art Unit: To be assigned

Examiner:

To be assigned

Atty. Docket: 0609.4560002/JAG/KRM

**Request to Approve Proposed Drawing Corrections** 

Commissioner for Patents Washington, D.C. 20231

Sir:

Attached are copies of 12 sheets of drawings, containing proposed corrections to Figures 1A (pages 1/36 and 2/36), 1B-1 (page 5/36), 1C (pages 9/36 and 10/36), 2A (page 17/36), 2B (page 18/36), 2C (page 19/36), 3A (page 21/36), and 3B (page 22/36), shown in red. The proposed corrections to the Figures reflect the corrected nucleotide and amino acid sequences for three of the four proteins of the invention. Applicants note that these corrections have been included in the Sequence Listing filed concurrently herewith.

The proposed changes add no new matter to this application because the correct sequences were inherent to the ATCC deposited clones, ATCC Deposit Nos. 209933, 209934, and 98809, which were deposited prior to the filing of the present application. In this regard, the specification states: "While the ATCC deposits are believed to contain the de novo DNA cytosine methyltransferase cDNA sequences shown in SEQ ID Nos:1, 2, 3, and 4, the nucleotide sequences of the polynucleotide contained in the deposited material, as well as the amino acid sequence of the polypeptide encoded thereby, are controlling in the event of any conflict with any description of sequences herein." Specification, page 16, lines 12-17.

The specific nucleotide and amino acid corrections made to the Figures (as well as the Sequence Listing filed concurrently herewith) are presented in the Table below:

Li *et al.* Appl. No. 09/720,086

FIGURE NUMBER			CHANGE FROM:	CHANGE TO:	
1A	1/36	516	A	G (No change in amino acid)	
1A	1/36	843	Т	G	
1A	1/36	1036	С	G	
1A	1/36	1110	Т	C (No change in amino acid)	
1A	1/36	1116	Т	C (No change in amino acid)	
1A	2/36	1726	Т	С	
1B-1	5/36	918	Т	G	
1B-1	5/36	920	Т	G	
1C	9/36	1 - 123	1 - 123 Original nucleotides 1-123		
1C	9/36	1063 (corrected 940)	С	G	
1C	10/36	1599 (corrected 1476)	A	С	
1C	10/36	1602 (corrected 1479)	A	С	
1C	10/36	1693 (corrected 1570)	A	C (No change in amino acid)	
1C	10/36	2147 (corrected 2024)	A	G	
1C	10/36	2242 (corrected 2119)	A	G (No change in amino acid)	
2A	17/36	209	D	Е	
2A	17/36	274	Р	A	
2A	17/36	504	504 F		
2B	18/36	217	217 I		
2B	18/36	218	Y	D	
2C	19/36	237	Н	Q	
2C	19/36	416	Н	Р	
2C	19/36	417	Y	S	
2C	19/36	599	К	Е	
3A	21/36	209 (Dnmt3α)	D	E	
3A	21/36	274 (Dnmt3α)	P	A	

FIGURE NUMBER	PAGE NUMBER	NUCLEIC OR AMINO ACID NUMBER	CHANGE FROM:	CHANGE TO:
3A	21/36	217 (Dnmt3β)	I	R
3A	21/36	218 (Dnmt3β)	Y	D
3B	22/36	237 (DNMT3A)	Н	Q
3B	22/36	416 (DNMT3A)	Н	P
3B	22/36	417 (DMNT3A)	Y	S
3B	22/36	599 (DMNT3A)	К	Е

A summary of these changes is presented below:

SUMMARY OF NO. OF NUCLEOTIDE/AMINO ACID CHANGES PER PROTEIN					
	No. I	Nucleotide Changes	No. Amino Acid Changes		
Mouse Dnmt3a	6	(Fig. 1A)	3 (Fig. 2A)		
Mouse Dnmt3b	2	(Fig. 1B-1)	2 (Fig. 2B)		
Human DNMT3A	6	(Fig. 1C)	4 (Fig. 2C)		
a					

Applicants request that the Examiner approve the proposed corrections. After official communication of such approval, Applicants will make the appropriate corrections to the formal drawings.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Karen R. Markowicz Agent for Applicants

Registration No. 36,351

Date: <u>July 23, 2001</u>

1100 New York Avenue, N.W.

Suite 600

Washington, D.C. 20005-3934

(202) 371-2600

P:\USERS\pdomally\KAREN\0609\4560002\figcorrection.doc